

In cooperation with Khon Kaen University with supported by Thai Beverage Logistics Company Limited and organized by Mekong Institute

# Curriculum Design Statement (CDS)

Training and Field Practicum on

# Logistics and Supply Chain Management

July 17 - August 13, 2019













July 17 – August 2, 2019 @ MI's Residential Training Center, Khon Kaen, Thailand

Field Practicum Phase:

August 3 – 11, 2019 @ Different Locations of the Company's Branches in

- Lampang province,
- Khon Kaen province,
- Nakhon Ratchasima province, and
- Pra Nakhorn Sri Ayutthaya province

Program Reflections Phase:

August 12- 13, 2019 @ MI's Residential Training Center, Khon Kaen, Thailand

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Table of Contents					
1. Introduction					
2. Project Approach					
a. Project Roadshow					
b. Training and Synthesis3					
c. Internship Program and Field Practicum3					
d. Networking and Collaboration3					
3. Training Objectives					
4. Training Outputs and Outcomes					
5. Target Participants and Training Expenses4					
i. Target Participants4					
ii. Training Expenses as a Grant4					
6. Duration and Location5					
7. Training Modules and Tentative Schedule5					
8. Structured Learning Visits and Field Practicum7					
i. Structured Learning Visits (SLVs)7					
ii. Field Practicum7					
9. Training Assignments					
10. Resource Persons					
11. Curriculum Design & Methodology					
12. Monitoring and Evaluation (M&E)9					
13. Brief Program Schedule					
14. Contacts					

# Training and Field Practicum on Logistics and Supply Chain Management

#### 1. Introduction

Logistics plays a critical role in the advancement of national trade, trade integration and contributes toward economic progress. Logistics is I the backbone of all industries including food and beverage industry that covers manufacturers and distributors of soft drinks, bottled water, energy drinks, sports drinks, milk products, coffee and tea based products, nutritional drinks, and alcohol products<sup>1</sup>. Logistics services are typically provided by a private logistics company to a retail or industrial firm. The quality and efficiency of these services heavily depend on economy-wide features, including government interventions, which are typically referred to as logistics performance, following the World Bank Logistics Performance Index (LPI)<sup>2</sup>. To contribute to the development of logistics services related to various activities in support trade and the conduct of international business, the Governments in Greater Mekong Subregion (GMS) countries including Thailand have prioritized the enhancement of the capacity development, competency and efficiency of the country's logistics service providers, especially those offering transport and warehouse management services<sup>3</sup>.

Thai Beverage Logistics Company Limited (TBL) was established to provide services on warehouse, logistics and transportation for goods to various customers in Thailand. The company has emphasized and contributed regularly on education support programs according to the company's strategy. Through the education support program, the company signed an agreement with Khon Kaen University (KKU) for providing capacity development to company's operational level staff and students of academic institutes / universities for exchange experience, knowledge, skills needed to perform jobs and education competently. KKU professors have designed tailor made curriculum and delivered trainings on logistics and supply chain to their staff for more than 4 years. Following such best practices, the company is keen to further disseminate skills and knowledge to related stakeholders - focusing on final year university students from Ho Chi Minh City in Vietnam. This will provide an opportunity to gain knowledge and skills on logistics together with conducting field practicum business operation principle of the company for future career, conduct further research on freight transport and logistics development.

Against this backdrop, Mekong Institute (MI) in cooperation with Khon Kaen University, Thailand and universities in Ho Chi Minh City, Vietnam is organizing a training and field practicum on the theme 'Capacity Development on Logistics and Supply Chain Management' targeting the third and final year university students of Ho Chi Minh City in Vietnam. The activity will be implemented in three phases. First phase will comprise of training at MI's residential training center, Khon Kaen, Thailand on July 17 – August 2, 2019, second phase will be field practicum at different offices of Thai Beverage Logistics Company Limited in Thailand on August 3 - 11, 2019 and final phase will be a synthesis and evaluation (S&E) workshop of the program at MI from August 12 - 13, 2019.

#### 2. Project Approach

Briefly, the project approach consists of four stages as following:



<sup>&</sup>lt;sup>1</sup> <u>http://thebeverageindustry.com/</u>

<sup>&</sup>lt;sup>2</sup> Logistics Competencies, Skills, and Training A Global Overview by Alan McKinnon, Christoph Flöthmann, Kai Hoberg, and Christina Busch, World Bank Group, September, 2017, Executive Summary

<sup>&</sup>lt;sup>3</sup> https://siam-shipping.com/development-thailand-logistics/

# a. Project Roadshow

- A management team from Thai Beverage Logistics Company Limited, professors / experts of Department of Industrial Engineering, Khon Kaen University and MI's representatives will visit target universities in Ho Chi Minh City, Vietnam on June 24-25, 2019,
- Discussions with various organizations will be held for providing the project information, objectives, expectation of the activity, outcomes, scope of collaboration and engagement of project coordinator, criteria and selection, training expenses, details of training and field practicum etc.

# b. Training and Synthesis

- Training Curriculum will be designed and developed by Professors from the Department of Industrial Engineering (IE), Khon Kaen University and MI experts from Trade and Investment Facilitation department.
- Seventeen day training will be conducted for twenty (20) third and final year students of universities involved in logistics and Industrial Engineering subjects from Ho Chi Minh City, Vietnam on July 17 – August 2 at MI's residential training center, Khon Kaen, Thailand.
- A synthesis & evaluation (S&E) workshop of the project will be conducted on August 12 13, 2019 at Mekong Institute, Khon Kaen in order to review the learning, field practicum results and obtain feedback on the program.
- Students will be divided into groups and each group will share practices and outcomes from their implementation experiences in the S&E workshop.

# c. Field Practicum

- Field orientation will be provided to the participants,
- The twenty (20) students as participants will be divided into four groups according to branches of company in i. Lampang province, ii. Khon Kaen province, iii. Nakhon Ratchasima province, and iv. Pra Nakhorn Sri Ayutthaya province,
- Each group will be provided accommodation near the field location under supervision of each field office,
- Each group will be supervised by each field location with hands-on practice and daily monitoring in order to support the students,
- Each group will be assigned with tasks to observe and practice on logistics business supply chain, marketing and management and planning of transport and logistics, and others,
- In the middle of the practicum, a team of professors and MI staff will visit each group for mid-term follow up.

# d. Networking and Collaboration

- A group of third and final year students will be chosen as "Ambassadors" of the company and will be assigned to disseminate information and support the management team of Thai Beverage Logistics Company Limited in their activities in Vietnam as required;
- Upon graduation, a student may be considered for higher studies,
- Upon graduation, a student may apply for jobs in Thailand and Vietnam.

# 3. Training Objectives

The main objective of the project is to enhance knowledge and skills on logistics operations & services, planning and management for greater efficiency and effectiveness of the transport and logistics sector.

Specifically, it aims;

- i. To address the importance of logistics and its supply chain in practices in the beverage industry,
- ii. To provide students with experiential learning opportunities in entire supply chain on logistics,
- iii. To provide the students opportunities to learn new technologies, products, and know-how in logistics planning and management,
- iv. To foster relationships and develop regional network among Thai Beverage Logistics Company Limited and students for regional cooperation, integration and future collaboration,
- v. To introduce working careers in the beverage industry for university students both in and outside the country,
- vi. To assess the possibility of further supporting potential students for higher education.

# 4. Training Outputs and Outcomes

At the end of the program, the students as participants should be able to acquire knowledge and practical skills on different pertinent topics. They should have deep understanding on the significance of sustainable practices in transport and logistics for the beverage industry.

Moreover, this program will also provide:

- Information on procedures, formalities and practices in transport and logistics activities and management;
- Strategies on transport and logistics planning and management to complement efficient logistics program in the respective countries;
- Experimental learning opportunities in logistics for the beverage industry;
- Enhancement of the participants' knowledge and practices on effective implementation of logistics procedures and logistics management in beverage industry,
- Exposure to training, working, and living conditions in a foreign country and interacting with students and faculties from different universities;
- Network created among students and academic institutions from Vietnam, and Thai Beverage Logistics Company Limited for enhanced regional cooperation, integration and future collaboration.

# 5. Target Participants and Training Expenses

# i. Target Participants

The program targets twenty (20) third and final year university students from universities in Ho Chi Minh City, Vietnam who are studying on logistics and transportation, logistics and supply chain management, IT and industrial engineering major/subjects. List of universities for recruitment are;

- 1. Ho Chi Minh City University of Technology,
- 2. Ho Chi Minh City University of Transport,
- 3. International University Vietnam National University HCM City,
- 4. Etc.

Selection criteria of students:

- Be a third and final year student of university in Ho Chi Minh City, Vietnam;
- Recommended by the President/concerned authority of the university;
- Be able to communicate (speak, understand, read and write) at acceptable level in written and spoken English;
- Willing to participate cross-culturally at international level;
- Be in good health both physically and mentally;
- Be able to attend the entire course, including field practicum and outdoor activities.

Important criteria for participant selection are English language proficiency and ability to commit to full attendance and fulfilling course requirements. The training will be announced through coordination of universities in Vietnam and MI's channel. Applications will be reviewed by MI and candidates will be selected in consultation with the Thai Beverage Logistics Company Limited and Department of Industrial Engineering, Khon Kaen University, Thailand.

# ii. Training Expenses as a Grant

The program is designed for the third and final year students of universities in Ho Chi Minh City, Vietnam. The training expenses as a Grant will be covered and provided to twenty (20) third and final year students from selected universities in Ho Chi Minh City involved in industrial engineering, transport and logistics. It includes transportation (by flight from Ho Chi Minh to MI, Khon Kaen and by land at the field site), accommodation during the project activity period, meals (breakfast, lunch and dinner), course kits, training materials, and other activities eg. Cultural visit designed under the program.

# 6. Duration and Location

The program comprises of three phases as follows;

- Learning phase: Seventeen day training program will be held on July 17 August 2, 2019 at the MI's residential training center, Khon Kaen, Thailand
- Field practicum phase: Nine-day practicum will be implemented in different locations of the company's braches in Lampang province, Khon Kaen province, Nakhon Ratchasima province, and Pra Nakhorn Sri Ayutthaya province on August 3 11, 2019
- Program reflection phase: Two-day synthesis and evaluation (S&E) workshop will be conducted on August 12 - 13, 2019 at MI, Khon Kaen, Thailand.

7. Training Modules and Tentative Schedule

In this course, participants will explore ten interrelated modules together with topics provided by TBL experts as below:

Module	Title	Topics by TBL			
Module 1	Introduction to Logistics and Supply Chain Management				
Module 2	Introduction to Transportation Management	<ul> <li>Overview of Ambient Logistics</li> </ul>			
Module 3	Introduction to Warehouse Management	for Thai Beverage Products Logistics Operations Warehouse			
Module 4	Introduction to Inventory Management				
Module 5	Introduction to Productivity Improvement				
Module 6	Introduction to Transportation and Distribution System	Planning and			
Module 7	Corporate Finance - financial management relevant to logistic companies by recognizing the costing elements, costing and financing	<ul> <li>Operation</li> <li>Transport Planning and Operation</li> </ul>			
Module 8	Logistics Performance and Measurement and Introduction to Logistics Auditor System for "Green"	<ul> <li>Logistics System and IT</li> <li>Data Analytics for Logistics</li> </ul>			
Module 9	Logistics Business Networking Platform and its Alliance				
Module 10	Corporate Social Responsibility and Freight Transport and Logistics	LOUISIICS			

Module 1: Introduction to Logistics and Supply Chain Management

The module contains an overview of principles, history, knowledge and, current global and regional status of logistics. Topics included in this module are as following:

- Definitions of logistics and supply chains
- Components of logistics and supply chains
- Main logistics operations
- Logistics strategies, locations, transportation inventory applications
- Basic logistics operations in/for the beverage product industry
- Some mathematical techniques and computations applied in logistics.

Module 2: Introduction to Transportation Management

Transportation management is also referred to as transportation and logistics management. In this module, the processes involved in planning and coordination while delivering goods from one place to another will be studied. Transportation managers are responsible for complete and effective shipment of cargos for a trading company. The module will cover topics on

- Introduction to transportation models and flows of products and services
- Introduction to transportation problems: Shortest Path, Travelling Salesman Problem (TSP), Vehicle routing problem
- Condition to transportation (Law, rule and regulations)
- Solving specialized transportation and assignment problems

Module 3: Introduction to Warehouse Management

This module will present fundamental concepts of warehouse management together with case studies from companies who have saved cost successfully and improved their processes through effective warehouse management. The module will cover topics on

- Roles and Types of Warehouse
- Storage System and Material Handling
- Warehouse Design and Layout
- Warehouse Operations

Module 4: Introduction to Inventory Management

Inventory is one of the valuable assets, which permits smooth operations of production and sales processes of a firm. In retail, manufacturing, food service, and other inventory-intensive sectors, effective inventory management is at the core of their business. A shortage of inventory, especially in time of need, can be detrimental to businesses. This module introduces the basic concepts of inventory management covering the following major topics.

- Roles of inventory
- Inventory-related costs
- Measuring inventory performance
- Basic inventory control models

Module 5: Productivity Improvement

This module introduces the concept of Productivity Improvement and applications of Work Study in Logistics and Supply Chain Business. Participants may be required to work in groups, engage in certain calculations/data analysis, and present their thoughts/views/comments throughout this class. This module will cover topics on

- Introduction to Productivity Improvement, and eight types of wastes according to Lean Manufacturing concept.
- Kaizen and ECRS as countermeasures to reduce eight types of wastes.
- Fundamentals of Work Study and related engineering tools used to investigate and analyze hidden problems.
- Review actual cases from industries and try to solve certain problems based on the knowledge acquired during this class.

Module 6: Introduction to Transportation and Distribution System

The module introduces the fundamental concepts of transportation and distribution models, including the application of these concepts in the real situation. Topics included in this module are as following:

- Overview of the Network Models
- Background and applications in the industry
- Mathematical models and solution algorithms
- Computer applications
- Verification and validation of the models
- Results interpretation

# Module 7: Corporate Finance

This module will present fundamental concepts of accounting and financial management, which are in compliance with International and the National Financial Report Standards and national accounting regulations. The module will cover topics on

 Financial management relevant to logistics companies by recognizing costing elements, pricing and financing Module 8: Logistics Performance and Measurement and Introduction to Logistics Auditor System

This module will discuss tools for promoting reduction of carbon and other emissions, which have an impact on climate change and energy use from goods transit as well as improving performances such as on fuel-efficiency, transport operations, etc. for logistics companies. Topics will be covered are

- Introduction to Logistics Performance Index (LPI)
- A tool to improve transport operations, and earning public recognition on 'Green Mark' certification.
- Key Performance Indicators for different categories of transportation
- Practical exercise on green logistics auditor system (GLA)

#### Module 9: Logistics Business Networking Platform and its Alliance

Logistics business networking and logistics alliances have important roles to play. This module will introduce an effective way for promoting "Logistics Alliance" - through the GMS Logistics Database in each of five Mekong countries for the purpose of information exchange, use of the applications, e.g. webbased database, and information sharing. The module will cover topics on

- Significance of business networking and alliances
- Opportunities and benefits of promoting logistics
- Practical exercises on logistics business platforms

Module 10: Corporate Social Responsibility and Freight Transport and Logistics

This module focuses on understanding the 'CSR" as a manner in which companies achieve a balance of a 'triple-bottom-line' of social, environmental and economic considerations while managing expectations of stakeholders and shareholders. The CSR concept will be discussed with respect to the fact that many businesses have integrated sustainable development goals (SDGs) into their CSR programs. The module will cover topics such as

- Definition and concept of CSR
- Integrating sustainable development goals (SDGs) into CSR programs
- Examples and best practices of CSR in freight and logistics.

#### 8. Structured Learning Visits and Field Practicum

#### i. Structured Learning Visits (SLVs)

Structured learning visits will be organized once a week during training period to gain knowledge on some best practices in Thailand. The participants will be assigned with the task to observe and formulate queries and prepare field notes on best practices, constraints and challenges. Necessary briefing about the places of visit, practices on effective implementation of logistics procedures for beverage industry and expectations from each group will be explained during the orientation.

#### **Objectives**

The participants are able to improve their understandings of freight transport and logistics management and development. The visit will inspire and motivate the participants to propose feasible Action Plans on how to improve the development status of freight transport and logistics in line with each national / local development context.

#### ii. Field Practicum

The field practicum will be organized after the training to provide students with experiential learning opportunities in whole supply chain on logistics, learn new technologies related to logistics, products, and know-how in effective implementation of logistics procedures and logistics management in beverage industry.

Prior to the field site, field orientation will be provided together with the assignments/tasks to observe and practice on logistics business supply chain, marketing and how to manage and plan the transport and logistics, and others. The participants will be divided into four groups according to branches of company located in

- Lampang province,
- Khon Kaen province,
- Nakhon Ratchasima province,
- Pra Nakhorn Sri Ayutthaya province.

Each group will comprise of third & final year students from each universities. The field coaches will supervise with hand-on practice, and do daily monitoring in order to support the students and faculties in the right track.

During the practicum, a team of professor and MI staff will visit each group for mid-term follow up. On the last two days of the program, the participants will meet each other again at MI, Khon Kaen in order to review the learning, field practicum results and obtain feedback of the program. Below is a summary of the whole tentative program:



#### 9. Training Assignments

Training assignment will require participants to practice professional skills and integrate concepts of transport and logistics management for their own country linking to regional and international level. In addition, participants will work in groups, these activities will promote communications and promote national collaboration and foster a professional network of contacts among participants. Specific assignments will also be provided throughout the course.

#### **10. Resource Persons**

The team of resource persons / instructors will be comprised of experts of Department of Industrial Engineering, Khon Kaen University who have trained staff of Thailand Beverage Logistics Company Limited for more than four years together with MI experts from Trade and Investment Facilitation Department in their respective areas of competency.

#### 11. Curriculum Design & Methodology

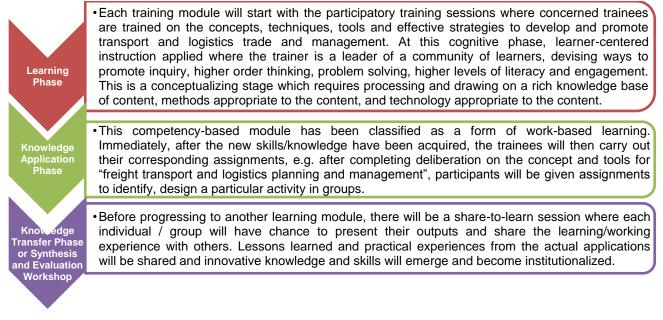
The training design is drawn from experience and capacity building needs of the company and tailored to the regional context. The training is designed to foster greater understanding of the training contents, and to focus on practical knowledge, respect adult learning principles, use real case studies, adopt participative approaches, as well as stimulate sharing and networking among the participants. Interactive experiential learning will be employed here. The training will be delivered in English and will adopt the following methods.

- Lectures and presentations
- Plenary discussions, case studies and group exercises
- Role plays and simulation games
- Structure learning visits related to transport and logistics management in Thailand

As required, all training modules are to be drawn from practical experiences and tailored to the needs of stakeholders involved on transport and logistics activities. It would incorporate concrete actions for follow-up activities after training.

Each training module is designed and delivered using an "Integrated Curriculum" approach. The salient features of this integrated curriculum are that competencies are carefully selected, integration of theoretical concepts with skills practice and essential knowledge directed at enhanced performance, and above all, various implicit competencies (e.g. facilitation, presentation, and communication, negotiation, and leadership skills) are integrated across the curriculum.

For each module, participants will go through three progressive phases of a modular training approach as follows:



# 12. Monitoring and Evaluation (M&E)

An effective monitoring and evaluation mechanism will be put in place to assess the progress and measure the results of the intervention. The M&E will be introduced in the pre, during and post stages of each modular training approach.

# 13. Brief Program Schedule

Tentative Program Schedule							
Date	Morning		Afternoon				
	Session 1	Session 2	Session 3	Session 4			
W. July 17	<ul> <li>Opening         <ul> <li>Consulate Gene Consulate in Kh</li> <li>Mr. Kosit Suksir Vice President of Public Company</li> <li>President of KK</li> <li>Dr. Watcharas L Executive Direct</li> </ul> </li> <li>Setting Norms and E Program Overview a</li> </ul>	on Kaen ngha, Executive of Thai Beverage / Limited U Leelawath, tor, MI Expectations/	Overview of Ambient Logistics for Thai Beverage Products by Dr. Sugris Limphothong, TBL	Logistics Operations by Mr. Worapong Chitchong, TBL			
T. July 18	M. 1: Logistics and Supply Chain Management by Dr. Weerapat Sessomboon, IE-KKU						
F. July 19	M. 2: Transportation Management by Dr. Thitipong Jamrus, IE-KKU						
S. July 20	Extra activities eg. Cultural visit designed under the program						

Tentative Program Schedule						
Date	Morning			fternoon		
	Session 1	Session 2	Session 3	Session 4		
S. July 21	Self Study – Free Time					
M. July 22	M. 5: Productivity Improve					
T. July 23	M. 3: Warehouse Manage	•	· · · · · · · · · · · · · · · · · · ·			
W. July 24			Nakrachata-amon, IE-KKU			
T. July 25	Warehouse Planning and Operation by Mr. Krisada Jongtangpiti, TBL	Field trip to TBL – Nakhon Ratchsima				
F. July 26	M. 6: Transportation and Distribution System by Dr. Komkrit Pitiruek, IE-KKU					
S. July 27	Extra activities eg. Cultural visit designed under the program					
S. July 28	Self- Study – Free Time					
M. July 29	Logistics System and IT to Luengnaruemitchai	oy Mr. Teerapan	pan Data Analytics for Logistics by Dr. Totrakool Khongsap			
T. July 30	M. 7: Corporate Finance - financial management relevant to logistic companies by recognizing the costing elements, costing and financing by Mr. Anh Nguyen Quan, Program Specialist, MI					
W. July 31	Transport Planning and Operation by Mr. Kawee Srimuang, TBLField trip to Customs House, Nongkhai province					
T. Aug 1	M. 8: Logistics Performan Measurement and Introdu Auditor System for "Green Chatterjee, Program, Spo Sa-nga Sattanun, MI	uction to Logistics n" by Ms. Sanchita	M.9: Logistics Business Networking Platform and its Alliance by Mr. Sa-nga Sattanun, Program Manager, MI			
F. Aug 2	M.10: Corporate Social Responsibility and Freight Transport and Logistics by Ms. Sanchita Chatterjee, Program Specialist, MI					
		Aug 3 - 11 on fi	eld practicum			
M. Aug 12	TBL Perspective and way & Studying)	forward (Working	<ul> <li>Reflection on training and field practicum based on tasks assignments</li> <li>Group Work and preparation</li> </ul>			
T. Aug 13	<ul> <li>Group presentation</li> <li>Overall program eva</li> </ul>	luation		Closing ceremony -Couse Report -Presentation -Awarding Certificates -Speeches by selected participants -Way Forward -Closing Remarks		

# 14. Contacts

For details, please contact MI Team

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